

2000-2005

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
29 July 2004 (29.07.2004)

PCT

(10) International Publication Number
WO 2004/063242 A1

(51) International Patent Classification⁷: **C08G 18/38, C09D 175/02**

(21) International Application Number: **PCT/US2004/000097**

(22) International Filing Date: 2 January 2004 (02.01.2004)

(25) Filing Language: **English**

(26) Publication Language: **English**

(30) Priority Data: **60/437,957 3 January 2003 (03.01.2003) US**

(71) Applicant (for all designated States except US): **E.I. DU PONT DE NEMOURS AND COMPANY [US/US]; 1007 Market Street, Wilmington, DE 19898 (US).**

(72) Inventors; and

(75) Inventors/Applicants (for US only): **COCORAN, Patrick, Henry [US/US]; 25 Laurel Hill Drive, Cherry Hill, NJ 08003 (US). WEBER, Joseph, Norbert [US/US]; 24 Welwyn Roäd, Newark, DE 19714 (US).**

(74) Agent: **DESHMUKH, Sudhir, G.; E.I. Du Pont de Nemours and Company, Legal Patent Records Center, 4417 Lancaster Pike, Wilmington, DE 19805 (US).**

(81) Designated States (unless otherwise indicated, for every kind of national protection available): **AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.**

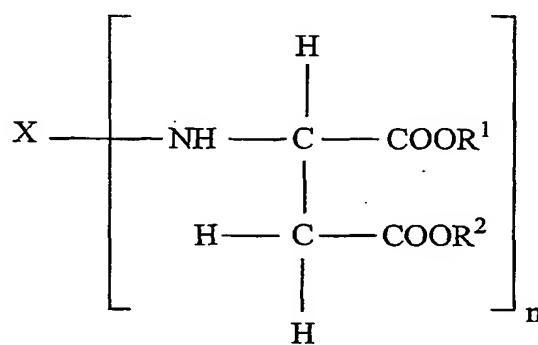
(84) Designated States (unless otherwise indicated, for every kind of regional protection available): **ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).**

Published:

- with international search report
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: DURABLE COATING COMPOSITIONS CONTAINING ASPARTIC COMPOUNDS



(57) Abstract: A coating composition comprising a binder of a. polyisocyanate crosslinking agent; b. an isocyanate-reactive component having at least one compound having the following formula: wherein X is an aliphatic or cycloaliphatic group, R¹ and R² are the same or different organic groups that are inert to isocyanate groups, and n is 2 to 4, and c. optionally, a polymeric component having a number average molecular weight of 5,000 to 50,000 having reactive groups that crosslink with an isocyanate, where the reactive groups are hydroxyl, carboxyl, glycidyl, amine and any mixtures thereof; and d. optionally, an oligomeric component having a number average molecular weight of 300 to 3,000 having reactive groups that crosslink with an isocyanate, where the reactive groups are hydroxyl, carboxyl, glycidyl, amine, aldimines, phosphoric acid, ketimine and any mixtures thereof; and contains the following additives: dissubstituted phenol antioxidant or a hydroperoxide decomposer, an ultraviolet light absorber, and a hindered amine light stabilizer.